## **CLAIMS**

## What Is Claimed:

- 1. (Original) A method for taxonomic identification of a biological analyte comprising:
  - (a) exposing the solution containing the analyte to a ligand specific for the analyte of interest that has been conjugated to a marker;
  - (b) separating the bound analyte from the excess marker-conjugated ligands;
  - (c) interrogation of the analyte for ligand binding via detection of the conjugated marker.
- 2. (Original) The method of claim 1, wherein the biological analyte is selected from the group comprised of:
  - (d) bacteria;
  - (e) viruses;
  - (f) proteinaceous toxin;
  - (g) rickettsiae;
  - (h) protozoa;
  - (i) fungi; and
  - (j) cytosolic protein.
- 3. (Currently Amended) The method of claim 1, wherein the separation of the bound analyte from the excess conjugated ligand is accomplished by via chromatography.
- 4. (Currently Amended) The method of claim 1, wherein the ligand is conjugated to a magnetic particle and the separation of the bound analyte from the non-binding components of the analyte solution is accomplished by magnetic separation with the

- ligand being tethered to the magnetic particle by at least fifteen at around forty Å for capture of microorganisms.
- 5. (Original) The method of claim 1, wherein the ligand is a heme compound.
- 6. (Original) The method of claim 1, wherein the ligand is a siderophore.
- 7. (Original) The method of claim 1, wherein the ligand is a polysaccharide.
- 8. (Original) The method of claim 1, wherein the ligand is a peptide specific for an outer membrane protein.
- 9. (Original) The method of claim 1, wherein the ligand is a peptide specific for a conjugated lipid.
- 10. (Original) The method of claim 1, wherein the marker is fluorescent and the detection is via fluorescence.
- 11. (Original) The method of claim 1, wherein the marker is luminescent and the detection is via luminescence.
- 12. (Original) The method of claim 1, wherein the marker is radioactive and the detection is via radioactivity.
- 13. (Original) The method of claim 1, wherein the marker is phosphorescent and the detection is via phosphorescence;

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Applicant requests that the foregoing Amendment be entered prior to examination.

Respectfully submitted,

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